Unit 10 Reveal Grade K

Content Area: **Math**
Course(s): **Language Arts, Art**
Time Period: **April**
Length: **2 weeks**
Status: **Published**

Unit Overview

UNIT 10 PLANNER
Numbers 16 to 19

PACING: 10 days

LESSON	MATH OBJECTIVE	LANGUAGE OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	LESSON	KEY VOCABULARY
Unit Opener Cross Out the Numbers	Students decompose numbers through 19 by playing a card game.				
10-1 Represent 16 and 17	Students represent the numbers 16 and 17 by counting out objects and writing the corresponding number.	Students match verbally and in writing the numerals 16 and 17 to sets of sixteen and seventeen objects.	Students discuss the value of hearing different viewpoints and approaches to problem solving.	10-1	Math Terms sixteen (16) seventeen (17)
Math Probe How Many Counters?	Students determine how many counters in a group of counters.				
10-2 Make 16 and 17	Students make 16 and 17 as ten ones and some more ones using concrete objects, drawings and equations.	Students explain how to make a group of 16 and 17 by adding 6–7 objects to a group of 10 using the expression some more.	Students identify personal traits that make them good students, peers, and learners.	10-2	equation make (compose)
10-3 Decompose 16 and 17	Students decompose 16 and 17 as ten ones and some more ones using concrete objects, drawings and equations.	Students decompose groups of 16–17 by explaining how to separate out a group of ten and the extra ones.	Students employ techniques that can be used to help maintain focus and manage reactions to potentially frustrating situations.	10-3	decompose (break apart) equation
10-4 Represent 18 and 19	Students represent the numbers 18 and 19 by counting out objects and writing the corresponding number.	Students will articulate numerals 18 and 19 by matching them to sets of eighteen and nineteen objects.	Students reflect on and describe the logic and reasoning used to make a mathematical decision or conclusion.	10-4	eighteen (18) nineteen (19)
10-5 Make 18 and 19	Students make 18 and 19 as ten ones and some more ones using concrete objects, drawings and equations.	Students explain how to make a group of 18 and 19 by adding 8-9 objects to a group of 10 using the expression some more.	Students engage in active listening and work collaboratively with a partner to complete mathematical tasks.	10-5	equation make (compose)
10-6 Decompose 18 and 19	Students decompose 18 and 19 as ten ones and some more ones using concrete objects, drawings and equations.	Students decompose groups of 18–19 by explaining how to separate out a group of ten and the extra ones.	Students recognize personal strengths through thoughtful self-reflection.	10-6	decompose (break apart) equation
Unit Review Fluency Practice					
Unit Assessment Performance Task					

Enduring Understandings

See Above

Essential Questions

See Above

Instructional Strategies and Learning Activities

LESSON 10-1

Represent 16 and 17

Learning Targets

- I can represent 16 and 17.
- I can explain how to represent 16 and 17.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **K.CC.A** Know number names and the count sequence.

◇ **K.CC.A.3** Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).

Math Practices and Processes

MPP Choose appropriate tools strategically.

MPP Attend to precision.

Focus

Content Objective	Language Objectives	SEL Objective
• Students represent the numbers 16 and 17 by counting out objects and writing the corresponding number.	• Students match verbally and in writing the numerals 16 and 17 to sets of sixteen and seventeen objects. • To support sense-making and to optimize output, ELs participate in MLR8: Discussion Supports.	• Students discuss the value of hearing different viewpoints and approaches to problem solving.

Coherence

Previous	Now	Next
• Students learned to count, write, and represent numbers to 10 (Units 2 and 3). • Students represented numbers to 15 (Unit 9).	• Students represent 16 and 17 using models and numbers. • Students explain how to represent 16 and 17.	• Students make and decompose 16 and 17 (Unit 10). • Students represent 18 and 19 (Unit 10).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand that they can use counting to determine groups of 16 and 17 or to make groups of 16 and 17. • Students understand that the numeral 16 stands for 16 items and the numeral 17 stands for 17 items.	• Students gain skill with counting and representing groups of 16 and 17. • Students develop fluency in writing the numbers 16 and 17.	• Students apply their counting skills to real-life situations. • Students use numbers to represent real-world quantities. *Application is not a targeted element of rigor for this standard.*

LESSON 10-2

Make 16 and 17

Learning Targets

- I can make groups of 16 and 17 objects.
- I can explain how to make groups of 16 and 17 objects.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **K.NBT.A** Work with numbers 11–19 to gain foundations for place value.

◇ **K.NBT.A.1** Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Math Practices and Processes

MPP Construct viable arguments and critique the reasoning of others.

MPP Model with mathematics.

Focus

Content Objective	Language Objectives	SEL Objective
• Students make 16 and 17 as ten ones and some more ones using concrete objects, drawings, and equations.	• Students explain how to make a group of 16 and 17 by adding 6–7 objects to a group of 10 using the expression *some more*. • To cultivate conversation, ELs participate in MLR4: Information Gap.	• Students identify personal traits that make them good students, peers, and learners.

Coherence

Previous	Now	Next
• Students composed 11 to 15 (Unit 9). • Students counted and represented 16 and 17 (Unit 10).	• Students compose 16 and 17.	• Students decompose 16 and 17 (Unit 10). • Students explore place value of tens and ones digits (Grade 1).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand 16 and 17 as a group of ten ones and some more ones. • Students understand that 16 and 17 can be represented by the equations $10 + 6 = 16$ and $10 + 7 = 17$.	• Students build proficiency in composing 16 and 17 and representing the composition with an equation.	• Students apply their understanding of how to make 16 and 17 in order to count real-world objects. *Application is not a targeted element of rigor for this standard.*

LESSON 10-3

Decompose 16 and 17

Learning Targets

- I can decompose groups of 16 and 17 objects.
- I can explain how to decompose groups of 16 and 17 objects.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **K.NBT.A** Work with numbers 11–19 to gain foundations for place value.

◇ **K.NBT.A.1** Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Math Practices and Processes

MPP Make sense of problems and persevere in solving them.

MPP Model with mathematics.

Focus

Content Objective

- Students decompose 16 and 17 as ten ones and some more ones using concrete objects, drawings, and equations.

Language Objectives

- Students decompose groups of 16–17 by explaining how to separate out a group of ten and the extra ones.
- To optimize output, ELs participate in MLR3: Critique, Correct, and Clarify.

SEL Objective

- Students employ techniques that can be used to help maintain focus and manage reactions to potentially frustrating situations.

Coherence

Previous

- Students decomposed 11 to 15 (Unit 9).
- Students composed 16 and 17 (Unit 10).

Now

- Students decompose groups of 16 and 17 objects.

Next

- Students count and represent 18 and 19 (Unit 10).
- Students explore place value of tens and ones digits (Grade 1).

Rigor

Conceptual Understanding

- Students understand that the numbers 16 and 17 can be decomposed into groups of ten ones and some more ones.
- Students understand that 16 and 17 can be represented by the equations $16 = 10 + 6$ and $17 = 10 + 7$.

Procedural Skill & Fluency

- Students build proficiency in decomposing 16 and 17 and representing the decomposition with an equation.

Application

- Students apply their understanding of how to decompose 16 and 17 when counting real-world objects.

Application is not a targeted element of rigor for this standard.

LESSON 10-4

Represent 18 and 19

Learning Targets

- I can represent 18 and 19.
- I can explain how to represent 18 and 19.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **K.CC.A** Know number names and the count sequence.

◇ **K.CC.A.3** Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).

Math Practices and Processes

MPP Reason abstractly and quantitatively.

MPP Model with mathematics.

Focus

Content Objective

- Students represent the numbers 18 and 19 by counting out objects and writing the corresponding number.

Language Objectives

- Students will articulate numerals 18 and 19 by matching them to sets of eighteen and nineteen objects.
- To support Sense-Making and to optimize output, ELs will participate in MLR8: Discussion Supports.

SEL Objective

- Students reflect on and describe the logic and reasoning used to make a mathematical decision or conclusion.

Coherence

Previous

- Students learned to count and represent numbers to 15 (Unit 9).
- Students learned to count and represent 16 and 17 (Unit 10).

Now

- Students represent 18 and 19 using models and numbers.
- Students explain how to represent 18 and 19.

Next

- Students make and decompose 18 and 19 (Unit 10).
- Students count by ones to 50 (Unit 12).

Rigor

Conceptual Understanding

- Students understand that they can use counting to determine groups of 18 and 19 or to form groups of 18 and 19.
- Students understand that the numeral 18 stands for 18 items and the numeral 19 stands for 19 items.

Procedural Skill & Fluency

- Students gain skill with counting and representing groups of 18 and 19.
- Students develop fluency in writing the numbers 18 and 19.

Application

- Students apply their counting skills to real-life situations.
- Students use numbers to represent real-world quantities.

Application is not a targeted element of rigor for this standard.

LESSON 10-5

Make 18 and 19

Learning Targets

- I can make groups of 18 and 19 objects.
- I can explain how to make groups of 18 and 19 objects.

Standards ◆ Major ▲ Supporting ○ Additional

Content

◇ **K.NBT.A** Work with numbers 11–19 to gain foundations for place value.

◇ **K.NBT.A.1** Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Math Practices and Processes

MPP Make sense of problems and persevere in solving them.

MPP Construct viable arguments and critique the reasoning of others.

Focus

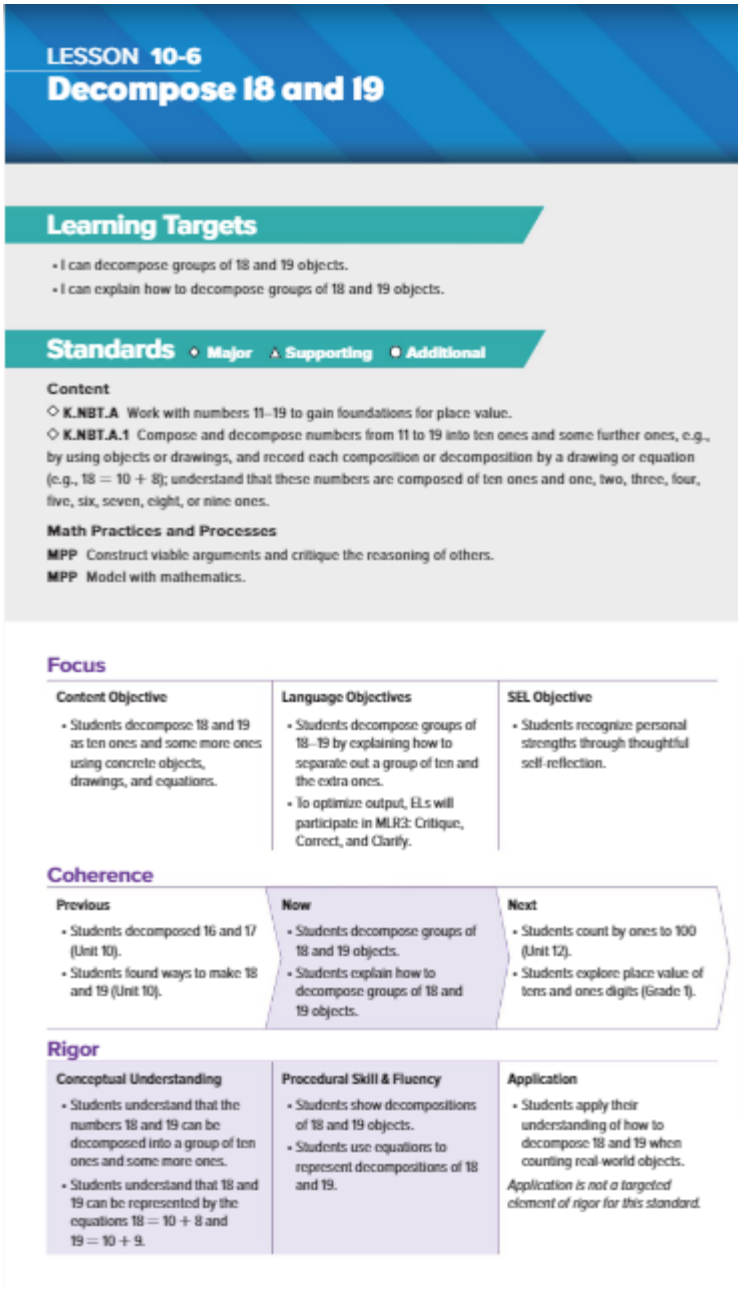
Content Objective	Language Objectives	SEL Objective
• Students make 18 and 19 as ten ones and some more ones using concrete objects, drawings, and equations.	• Students explain how to make a group of 18 and 19 by adding 8–9 objects to a group of 10 using the expression *some more*. • To cultivate conversation, ELs will participate in MLR4: Information Gap.	• Students engage in active listening and work collaboratively with a partner to complete mathematical tasks.

Coherence

Previous	Now	Next
• Students composed 16 and 17 (Unit 10). • Students counted and represented 18 and 19 (Unit 10).	• Students compose groups of 18 and 19 objects.	• Students decompose 18 and 19 (Unit 10). • Students explore place value of tens and ones digits (Grade 1).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand the numbers 18 and 19 as a group of ten ones and some more ones. • Students understand that 18 and 19 can be represented by the equations $10 + 8 = 18$ and $10 + 9 = 19$.	• Students build proficiency in composing 18 and 19 and representing the composition with an equation.	• Students apply their understanding of how to make 18 and 19 with real-world objects. *Application is not a targeted element of rigor for this standard.*



LESSON 10-6

Decompose 18 and 19

Learning Targets

- I can decompose groups of 18 and 19 objects.
- I can explain how to decompose groups of 18 and 19 objects.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **K.NBT.A** Work with numbers 11–19 to gain foundations for place value.

◇ **K.NBT.A.1** Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., 18 = 10 + 8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Math Practices and Processes

MPP Construct viable arguments and critique the reasoning of others.

MPP Model with mathematics.

Focus

Content Objective	Language Objectives	SEL Objective
• Students decompose 18 and 19 as ten ones and some more ones using concrete objects, drawings, and equations.	• Students decompose groups of 18–19 by explaining how to separate out a group of ten and the extra ones. • To optimize output, ELs will participate in MLR3: Critique, Correct, and Clarify.	• Students recognize personal strengths through thoughtful self-reflection.

Coherence

Previous	Now	Next
• Students decomposed 16 and 17 (Unit 10). • Students found ways to make 18 and 19 (Unit 10).	• Students decompose groups of 18 and 19 objects. • Students explain how to decompose groups of 18 and 19 objects.	• Students count by ones to 100 (Unit 12). • Students explore place value of tens and ones digits (Grade 1).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand that the numbers 18 and 19 can be decomposed into a group of ten ones and some more ones. • Students understand that 18 and 19 can be represented by the equations 18 = 10 + 8 and 19 = 10 + 9.	• Students show decompositions of 18 and 19 objects. • Students use equations to represent decompositions of 18 and 19.	• Students apply their understanding of how to decompose 18 and 19 when counting real-world objects. *Application is not a targeted element of rigor for this standard.*

Integration of Career Readiness, Life Literacies and Key Skills

PFL.9.1.2.CR.1	Recognize ways to volunteer in the classroom, school and community.
PFL.9.1.2.CR.2	List ways to give back, including making donations, volunteering, and starting a business.
PFL.9.1.2. FI.1	Differentiate the various forms of money and how they are used (e.g., coins, bills, checks, debit and credit cards).
PFL.9.1.2.FP.1	Explain how emotions influence whether a person spends or saves.
PFL.9.1.2.FP.3	Identify the factors that influence people to spend or save (e.g., commercials, family, culture, society).
PFL.9.1.2.PB.1	Determine various ways to save and places in the local community that help people save

	and accumulate money over time.
PFL.9.1.2.PB.2	Explain why an individual would choose to save money.
TECH.9.4.2.CI.1	Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
TECH.9.4.2.CI.2	Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).
TECH.9.4.2.CT.2	Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3).
TECH.9.4.2.CT.3	Use a variety of types of thinking to solve problems (e.g., inductive, deductive).
TECH.9.4.2.DC.3	Explain how to be safe online and follow safe practices when using the internet (e.g., 8.1.2.NI.3, 8.1.2.NI.4).
TECH.9.4.2.DC.6	Identify respectful and responsible ways to communicate in digital environments.
TECH.9.4.2.DC.7	Describe actions peers can take to positively impact climate change (e.g., 6.3.2.CivicsPD.1).
TECH.9.4.2.TL.2	Create a document using a word processing application.
TECH.9.4.2.TL.5	Describe the difference between real and virtual experiences.
TECH.9.4.2.TL.6	Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).
TECH.9.4.2.TL.7	Describe the benefits of collaborating with others to complete digital tasks or develop digital artifacts (e.g., W.2.6., 8.2.2.ED.2).

Technology and Design Integration

CS.K-2.8.1.2.AP.4	Break down a task into a sequence of steps.
CS.K-2.8.1.2.AP.5	Describe a program's sequence of events, goals, and expected outcomes.
CS.K-2.8.1.2.CS.1	Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
CS.K-2.8.1.2.DA.1	Collect and present data, including climate change data, in various visual formats.
CS.K-2.8.1.2.DA.3	Identify and describe patterns in data visualizations.
CS.K-2.8.1.2.DA.4	Make predictions based on data using charts or graphs.
CS.K-2.8.2.2.ITH.4	Identify how various tools reduce work and improve daily tasks.

Interdisciplinary Connections

LA.RL.K.4	Ask and answer questions about unknown words in a text.
LA.RI.K	Reading Informational Text
LA.RI.K.1	With prompting and support, ask and answer questions about key details in a text.
LA.RI.K.2	With prompting and support, identify the main topic and retell key details of a text.
LA.RI.K.3	With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.
LA.RI.K.4	With prompting and support, ask and answer questions about unknown words in a text.
LA.RI.K.7	With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).
LA.RI.K.8	With prompting and support, identify the reasons an author gives to support points in a text.

LA.RI.K.10	Actively engage in group reading activities with purpose and understanding.
LA.W.K.5	With guidance and support from adults, strengthen writing through response and self-reflection using questions and suggestions from peers (e.g., adding details).
LA.SL.K	Speaking and Listening
LA.SL.K.1	Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.
LA.SL.K.2	Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
LA.SL.K.3	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

Differentiation

- Understand that gifted students, just like all students, come to school to learn and be challenged.
- Pre-assess your students. Find out their areas of strength as well as those areas you may need to address before students move on.
- Consider grouping gifted students together for at least part of the school day.
- Plan for differentiation. Consider pre-assessments, extension activities, and compacting the curriculum.
- Use phrases like "You've shown you don't need more practice" or "You need more practice" instead of words like "qualify" or "eligible" when referring to extension work.
- Encourage high-ability students to take on challenges. Because they're often used to getting good grades, gifted students may be risk averse.

- **Definitions of Differentiation Components**:

    - Content – the specific information that is to be taught in the lesson/unit/course of instruction.
    - Process – how the student will acquire the content information.
    - Product – how the student will demonstrate understanding of the content.
    - Learning Environment – the environment where learning is taking place including physical location and/or student grouping

Differentiation occurring in this unit:

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Modifications and Accommodations

Refer to QSAC EXCEL SMALL SPED ACCOMMOCATIONS spreadsheet in this discipline.

Modifications and Accommodations used in this unit:

Benchmark Assessments

Benchmark Assessments are given periodically (e.g., at the end of every quarter or as frequently as once per month) throughout a school year to establish baseline achievement data and measure progress toward a standard or set of academic standards and goals.

Schoolwide Benchmark assessments:

Aimsweb benchmarks 3X a year

Linkit Benchmarks 3X a year

DRA

Additional Benchmarks used in this unit:

Reveal Unit assessments

Formative Assessments

Assessment allows both instructor and student to monitor progress towards achieving learning objectives, and can be approached in a variety of ways. **Formative assessment** refers to tools that identify misconceptions, struggles, and learning gaps along the way and assess how to close those gaps. It includes effective tools for helping to shape learning, and can even bolster students' abilities to take ownership of their learning when they understand that the goal is to improve learning, not apply final marks (Trumbull and Lash, 2013). It can include students assessing themselves, peers, or even the instructor, through writing, quizzes, conversation, and more. In short, formative assessment occurs throughout a class or course, and seeks to improve student achievement of learning objectives through approaches that can support specific student needs (Theal and Franklin, 2010, p. 151).

Formative Assessments used in this unit:

Teacher observation

Checklists

Questioning and Discussion

Quizzes

Summative Assessments

summative assessments evaluate student learning, knowledge, proficiency, or success at the conclusion of an instructional period, like a unit, course, or program. Summative assessments are almost always formally graded and often heavily weighted (though they do not need to be). Summative assessment can be used to great effect in conjunction and alignment with formative assessment, and instructors can consider a variety of ways to combine these approaches.

Summative assessments for this unit:

End of Unit assessments

Instructional Materials

See above

Standards

MA.K.CC.A.3	Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).